

# **Fighting, Control and Prevention of Transboundary Animal Diseases in the Republic of Tajikistan**

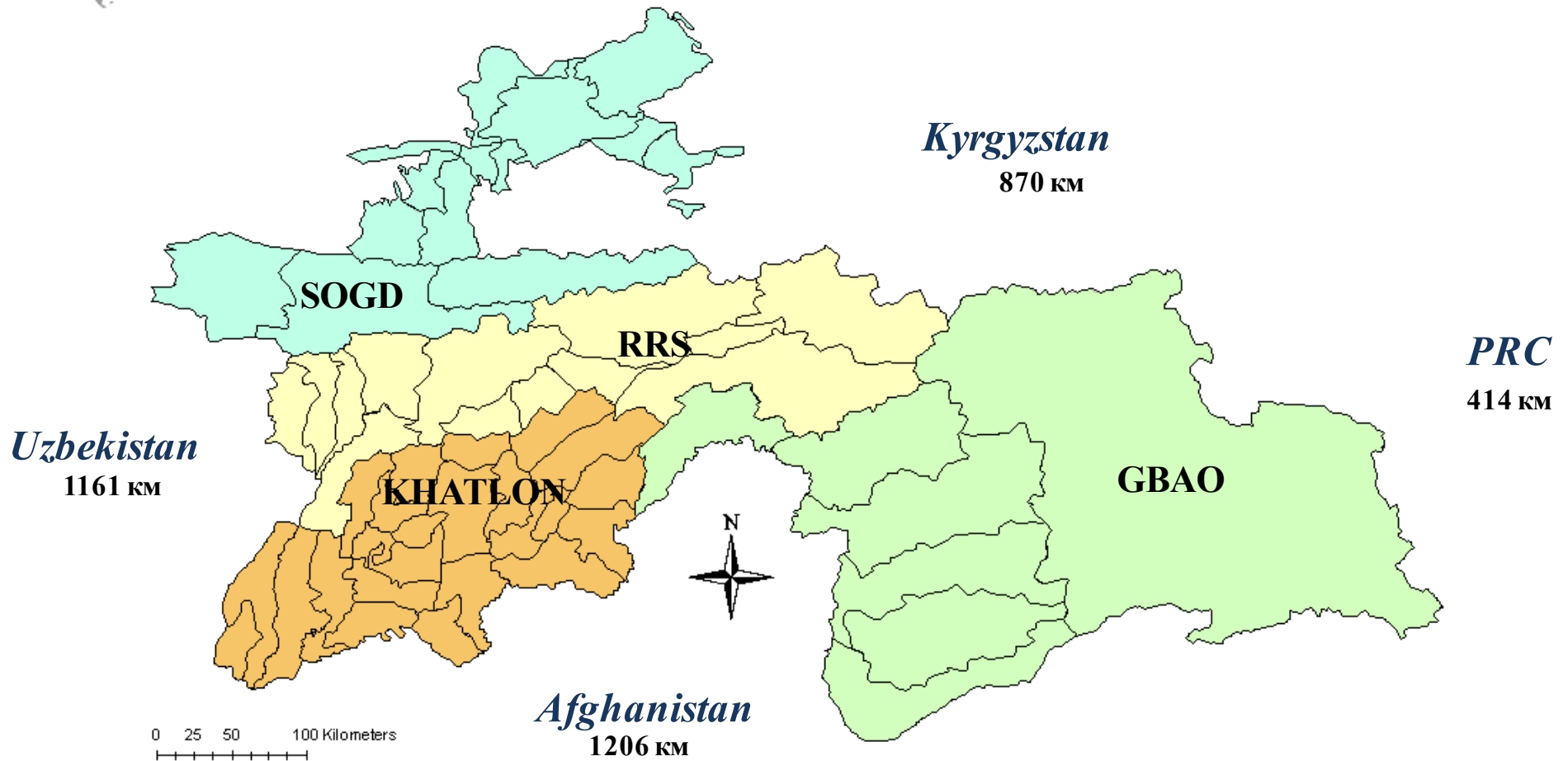
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## Brief Information about the Republic of Tajikistan



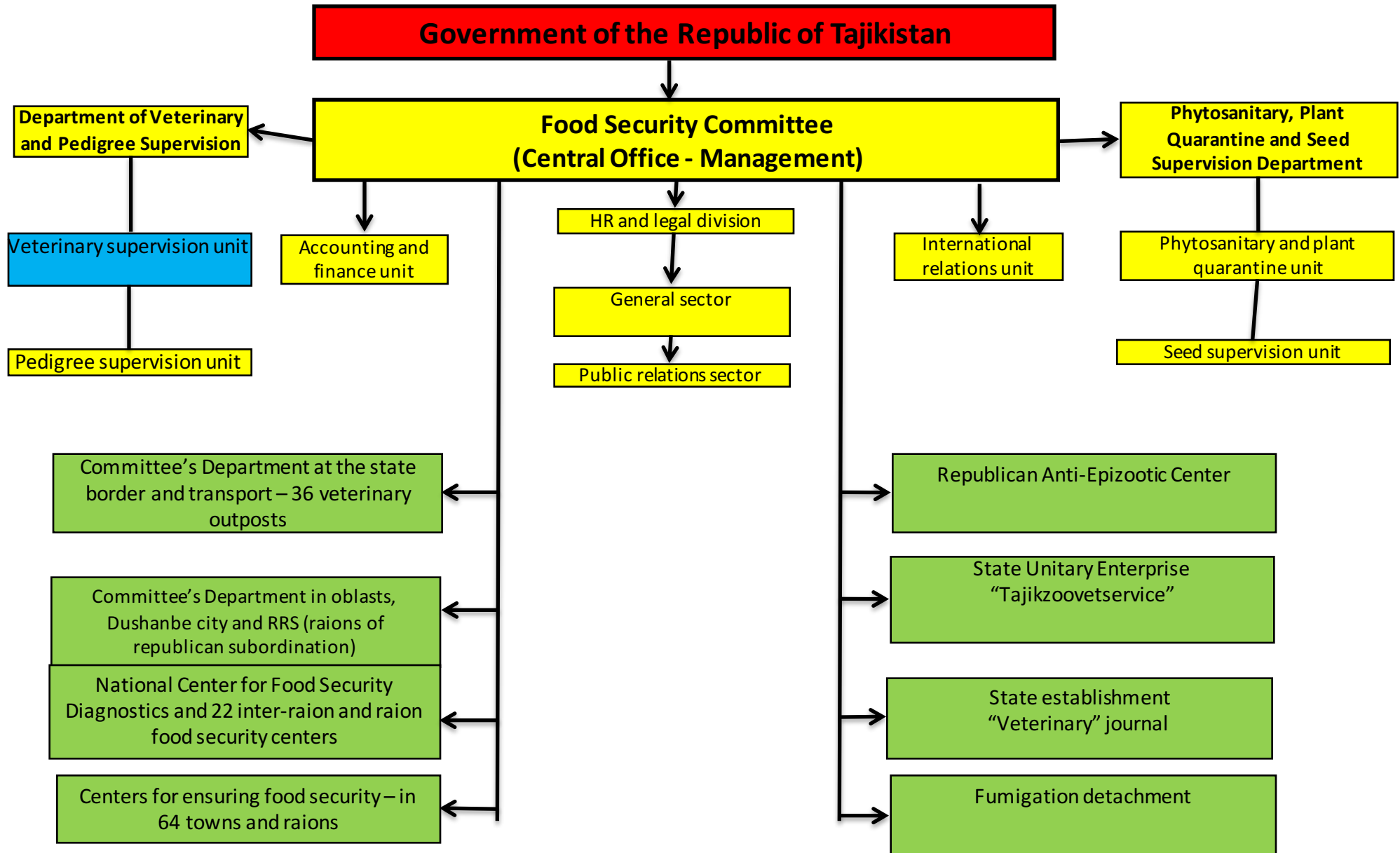
The state is located in Central Asia. In the south it shares borders with Afghanistan (the border length is 1,206 km), in the north and west with Uzbekistan (1,161 km), in the north with Kyrgyzstan (870 km), and in the east with China (414km). The total length of its borders is 3,651 km.

# Structure of the Service

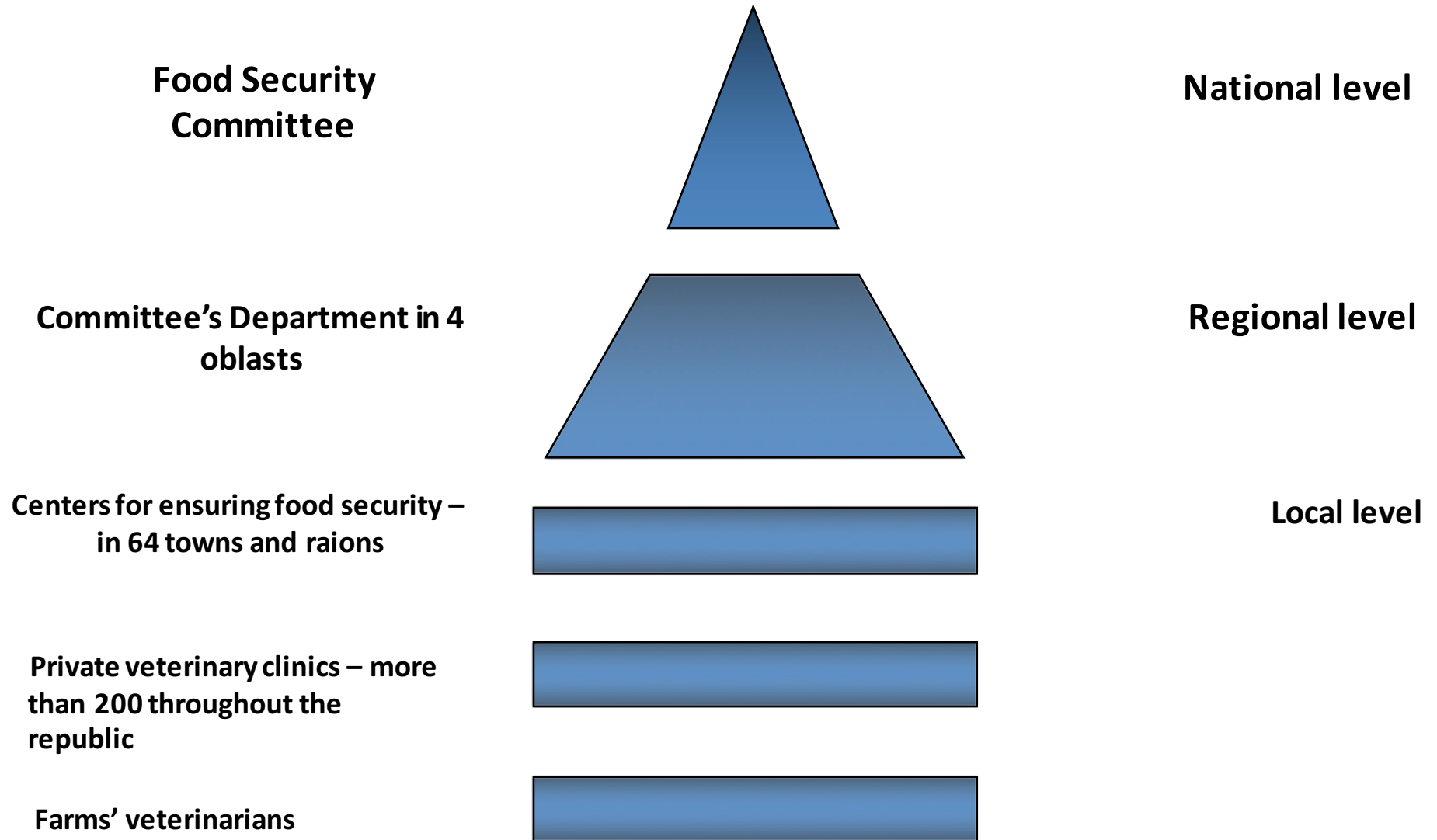
- **The Food Security Committee under the Government of the Republic of Tajikistan** was established by the Decree No. 595 of the Government of the Republic of Tajikistan dated December 29, 2017, on the basis of 4 organizations of the Ministry of Agriculture of the RT:
  - The State Veterinary Supervision Service;
  - The Service of State Phytosanitary Supervision and Plant Quarantine;
  - The Service of State Pedigree Supervision;
  - The State Seed Supervision Inspectorate.

In total, there are 2,538 employees in the Committee, of which **1,372 are veterinary specialists**.

# The Structure of the Food Security Committee under the Government of the Republic of Tajikistan

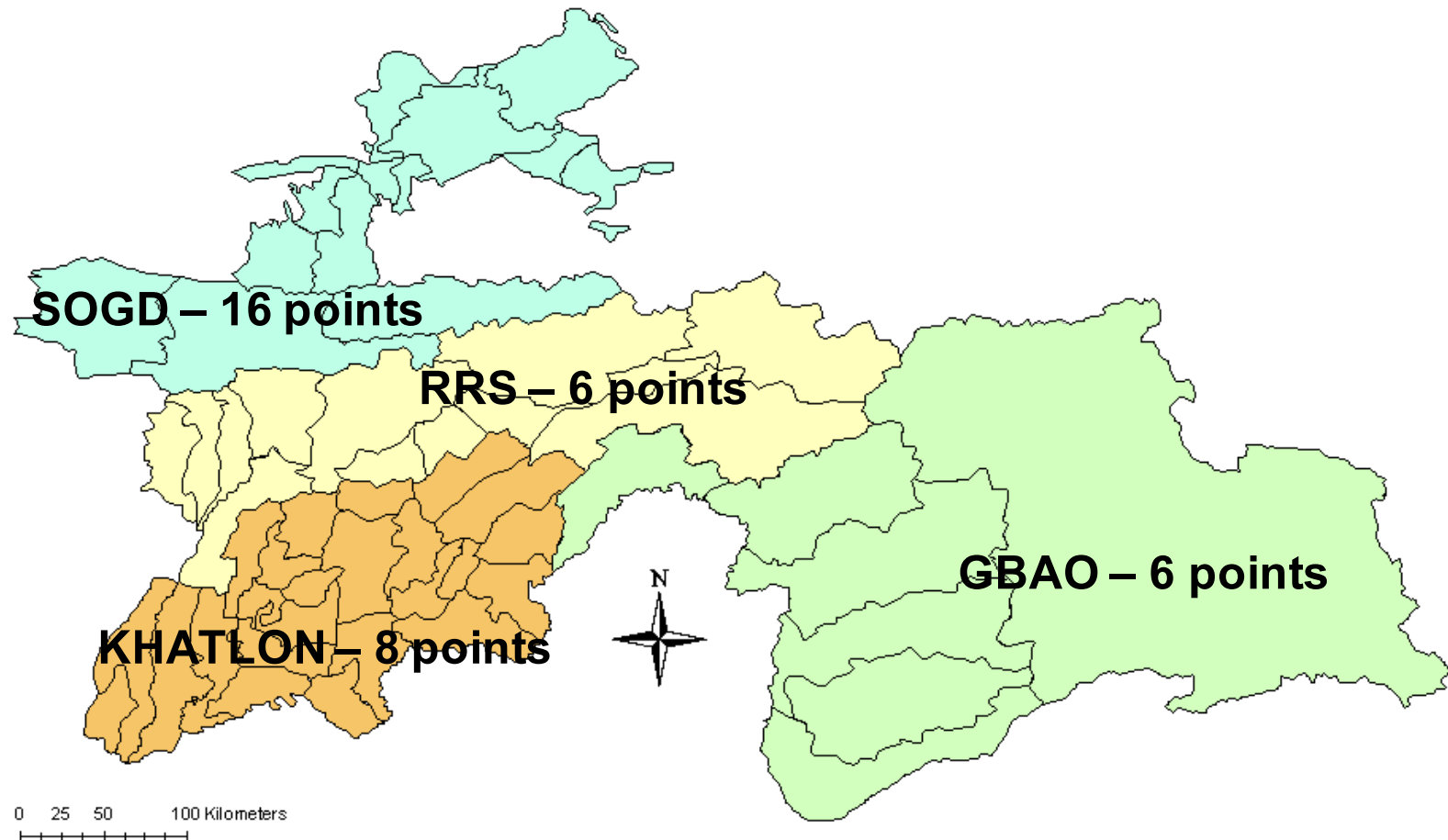


# Government of the Republic of Tajikistan



# STATE FOOD SECURITY BORDER CHECK POINTS AT THE STATE BORDER OF THE REPUBLIC OF TAJIKISTAN

- In total, there are 36 SFSB check points in the republic, of which:
  - 4 points at international airports;
  - 3 points at international railway stations;
  - 2 points at international truck inspection terminals;
  - 27 points at the state border.



# Laboratory Capacity

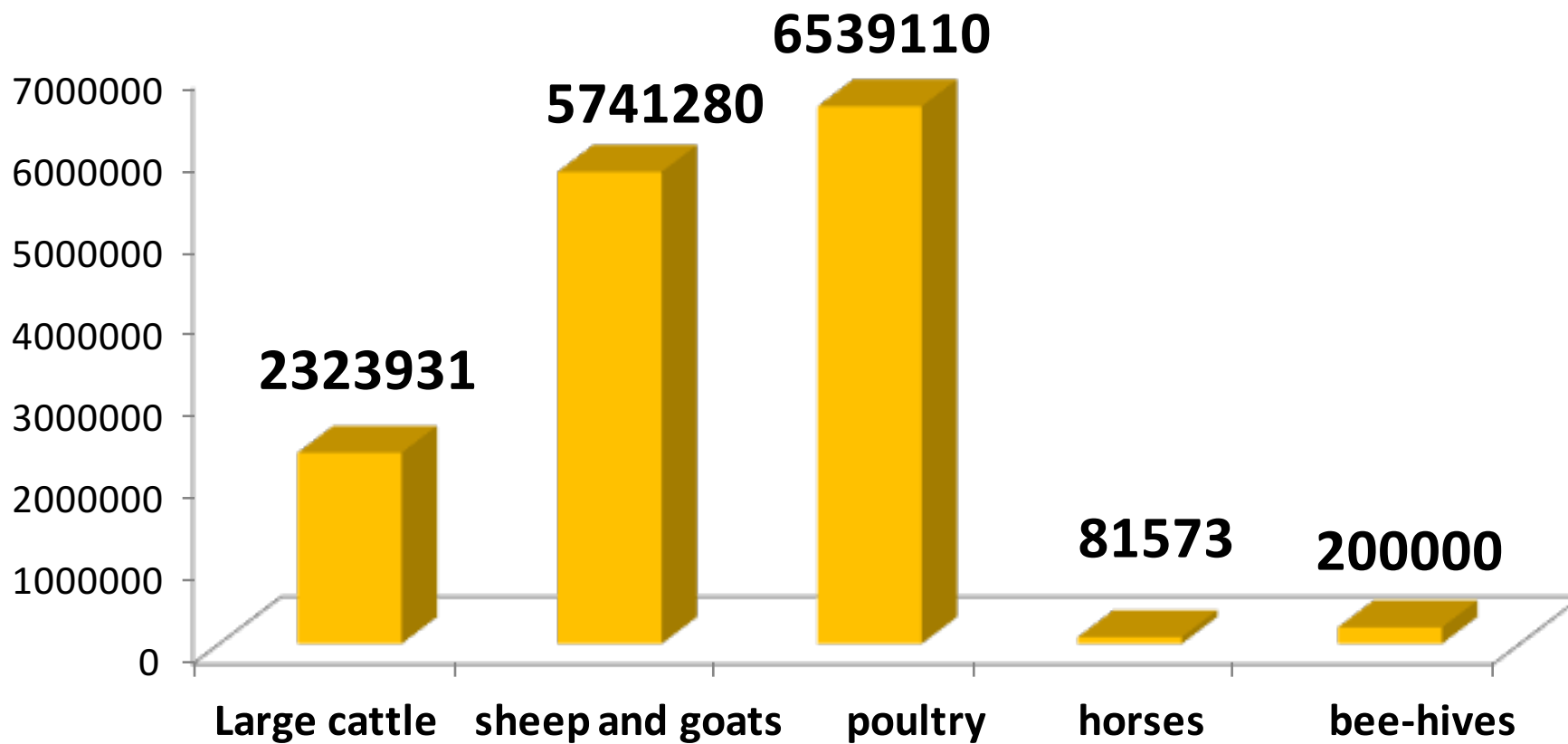
The republic has:

- the National Center for Food Safety Diagnostics, with 105 laboratory specialists. It consists of:
  - virological
  - serological
  - bacteriological
  - radiological
  - chemical toxicological
  - food safety
  - patho-morphological
  - and other departments.

There are also 3 regional and 19 raion and inter-raion diagnostic centers;

- In total, there are 425 laboratory specialists working in the republic.

# Animal Population in the Republic of Tajikistan





# Movement of animals

- Mainly small cattle (sheep and goats) is moved to winter and summer pastures in winter and summer time in Tajikistan;
- The movement of animals in spring and autumn seasons takes quite a lot of time (1.5 months in spring and 1.5-2.0 months in autumn), therefore cattle tracks play a big role and have the risk of spreading animal diseases;
- The total length of main cattle tracks (of republican importance) in the republic is more than 2.5 thousand km.
- Therefore, a plan of anti-epizootic measures is prepared in Tajikistan every year before driving animals to winter and summer pastures;
- In addition, diagnostic activities are carried out regarding animals' brucellosis and tuberculosis.

# Movement (migration) of animals

- Primarily serological surveys on brucellosis of large and small cattle is done before animal migrations at their places of permanent keeping. After receiving the results, the healthy animals will be vaccinated.
- Vaccination will be done by plan for:
  - ✓ Large & small cattle on anthrax and foot-and-mouth diseases compulsory;
  - ✓ Large cattle emphysematous blackleg(quarter evil), and youngsters of large cattle twice per year;
  - ✓ In some regions on small cattle-plague and pox;
  - ✓ Bradsot will be done in fall period; and
  - ✓ infectious goats pleuropneumonia in terms of epizootic situation;

# Movement (migration) of animals

- There are 21 veterinary inspection posts towards animal migration in Tajikistan during migration season of animals in the republic. Their objective is:

The relevant veterinary documents will be checked on animals pass (Vet Certificate #1 issued by local vet on animals health, copies of vaccination acts);

– Disinfection and disinsection (cube) will be done on animal ectoparasites;

These posts are working 24 hours in animal migration`s seasons, mainly local vet doctors and paramedics stay overnight in posts.

# Cattle breeds grown in the Republic of Tajikistan



Local breed **50%**



Black-motley breed **30%**



Swiss-zebu-like breed **10%**



Simmental breed **10%**



# Sheep and goat breeds grown in the Republic of Tajikistan



Angora breed of goats



Tajik breed of sheep



Gisar breed of sheep

## Horse breeds grown in the Republic of Tajikistan



Tajik breed of horses

- **The Government of the Republic of Tajikistan issued Resolution No. 487 dated October 4, 2011, “The Fund of Anti-Epizootic Activities”, which includes diagnostics, prevention and monitoring of 8 infectious diseases of agricultural animals:**

- 1. Foot and mouth disease**

2. Anthrax

- 3. Brucellosis**

4. Tuberculosis

- 5. Plague of small ruminants**

- 6. Rabies**

7. Sheep and goat pox

- 8. Birds plague (Newcastle disease)**

# Outbreaks of foot and mouth disease

- The last outbreak of the clinical form of FMD was registered in the republic in November 2011;
- No cases of the clinical form of this disease have been officially registered in the past 7 years.
- Based on the findings of the conducted research, it was identified that FMD of type O virus mainly circulated in the Republic during 2001-2012;



# Vaccination of animals against foot and mouth disease

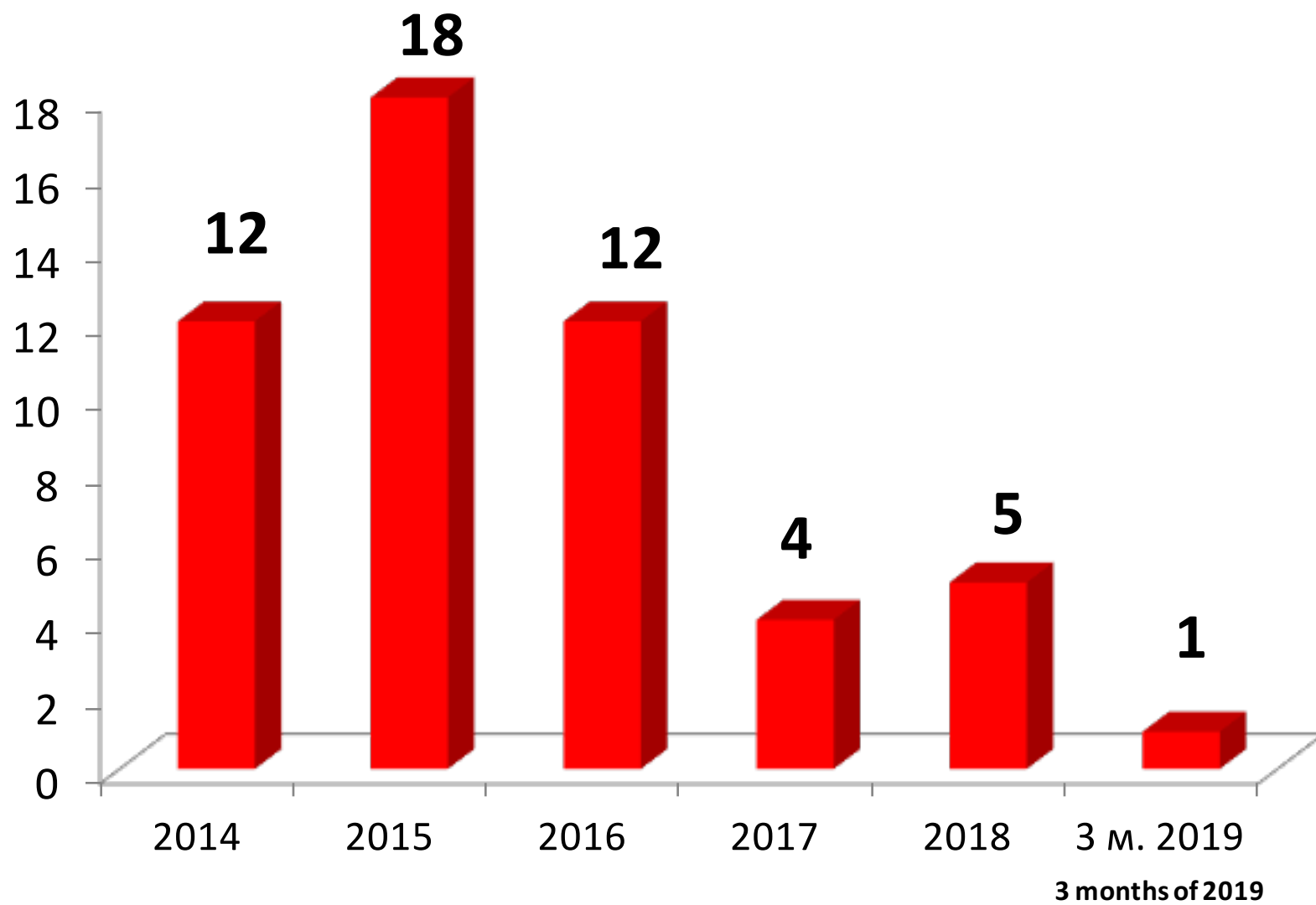
The following vaccines are mainly used in the republic :

- Trivalent vaccine of type A, O, Asia 1, produced in India, based on Raksha strain;
- Trivalent vaccine of type A, O, Asia 1, produced in India, based on FUTVAC strain;
- Trivalent vaccine of type A, O, Asia 1, produced in Russia, VIIZZh, Pokrov city;
- Bivalent vaccine of type A, O, produced in Russia, VIIZZh, Pokrov city;
- Trivalent vaccine of type A, O, Asia 1, produced in Russia, Shelkovsky bio-enterprise;
- Bivalent vaccine of type A, O, produced in Russia, Shelkovsky bio-enterprise.

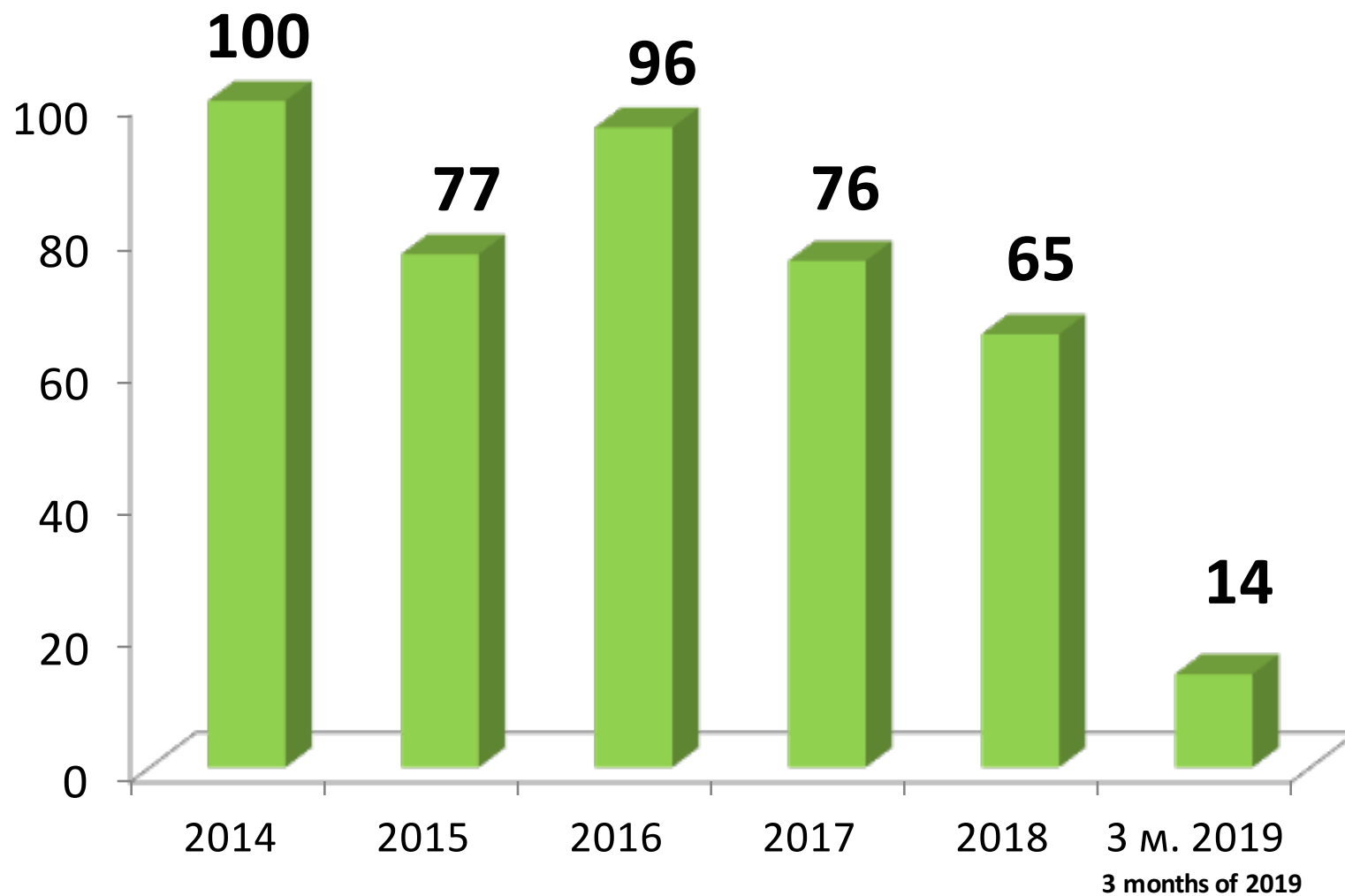
## FMD control measures for 2017-2018

Name of the region	Large cattle			Small cattle		
	Number of heads	Vaccinated	% of coverage	Number of heads	Vaccinated	% of coverage
<b>2017</b>						
<b>Republic, total</b>	<b>2,224,544</b>	<b>795,368</b>	<b>35.7</b>	<b>5,206,977</b>	<b>1,242,142</b>	<b>23.8</b>
Khatlon	943,908	328,081	34.8	1,969,275	617,904	31.4
Sogd	624,058	189,860	30.4	1,492,499	262,368	17.6
RRS	539,338	255,312	47.3	1,356,121	353,716	26.1
GBAO	117,240	22,115	18.9	389,082	8,154	2.1
<b>2018</b>						
<b>Republic, total</b>	<b>2,276,926</b>	<b>592,536</b>	<b>26.02</b>	<b>5,498,322</b>	<b>986,464</b>	<b>17.9</b>
Khatlon	979,728	332,710	27.6	2,302,359	591,468	25.68
Sogd	602,430	123,471	20.5	1,455,436	212,638	14.6
RRS	576,490	115,081	20.1	1,349,495	178,396	13.1
GBAO	118,728	21,274	17.9	391,032	3,962	1.01

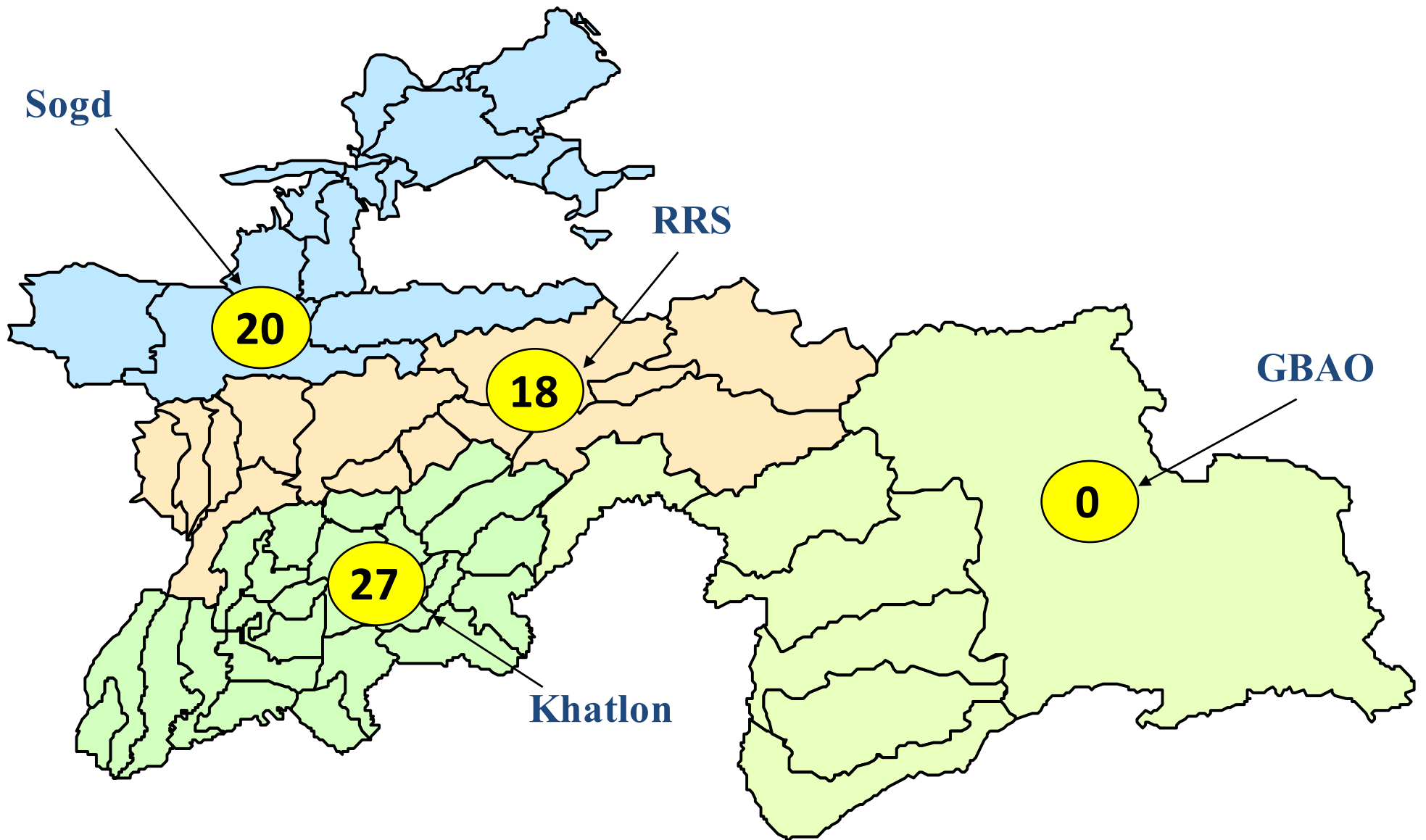
## Epizootic Situation on Anthrax



## Epizootic Situation on Rabies



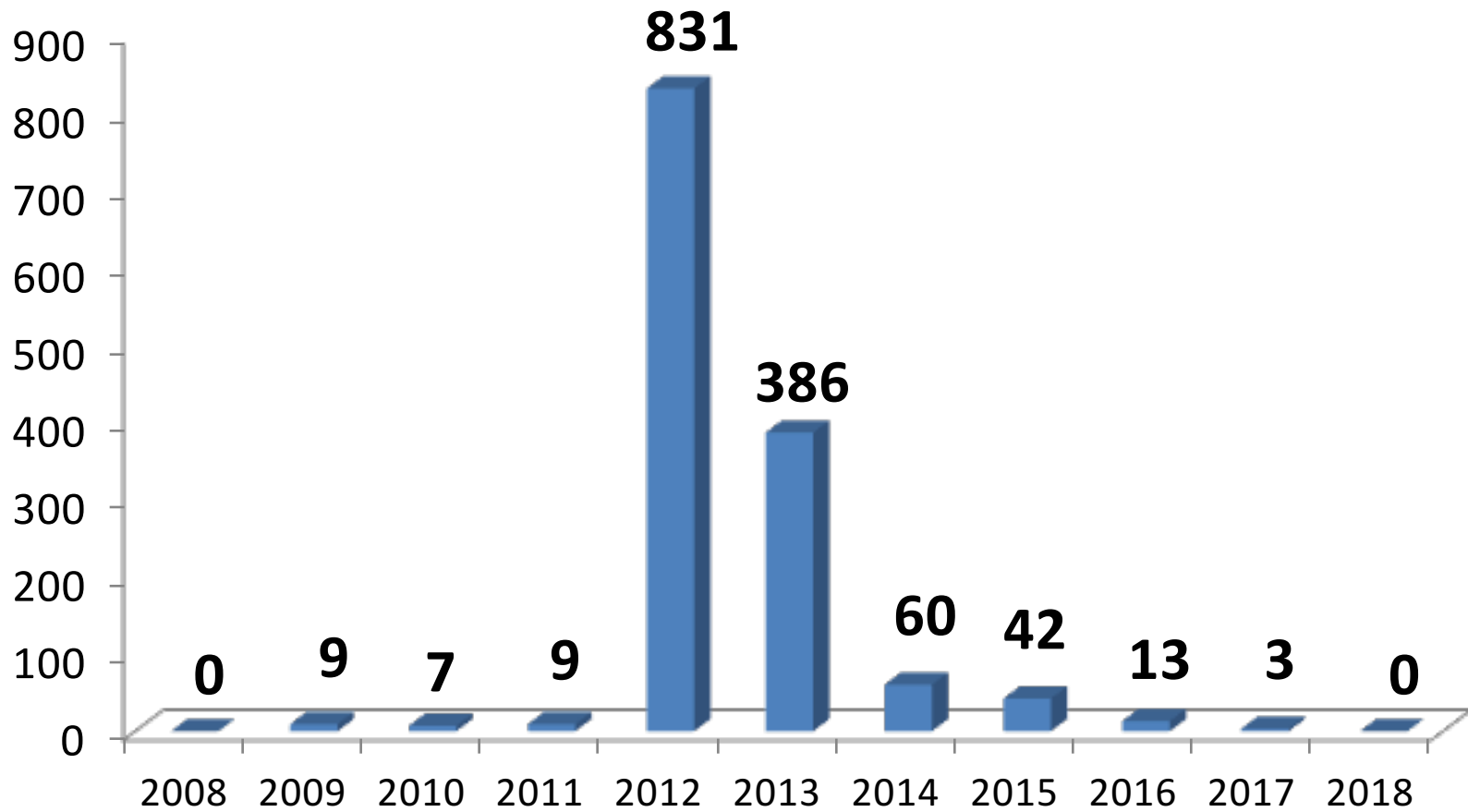
# Cases of rabies registered in the Republic of Tajikistan by oblast in 2018



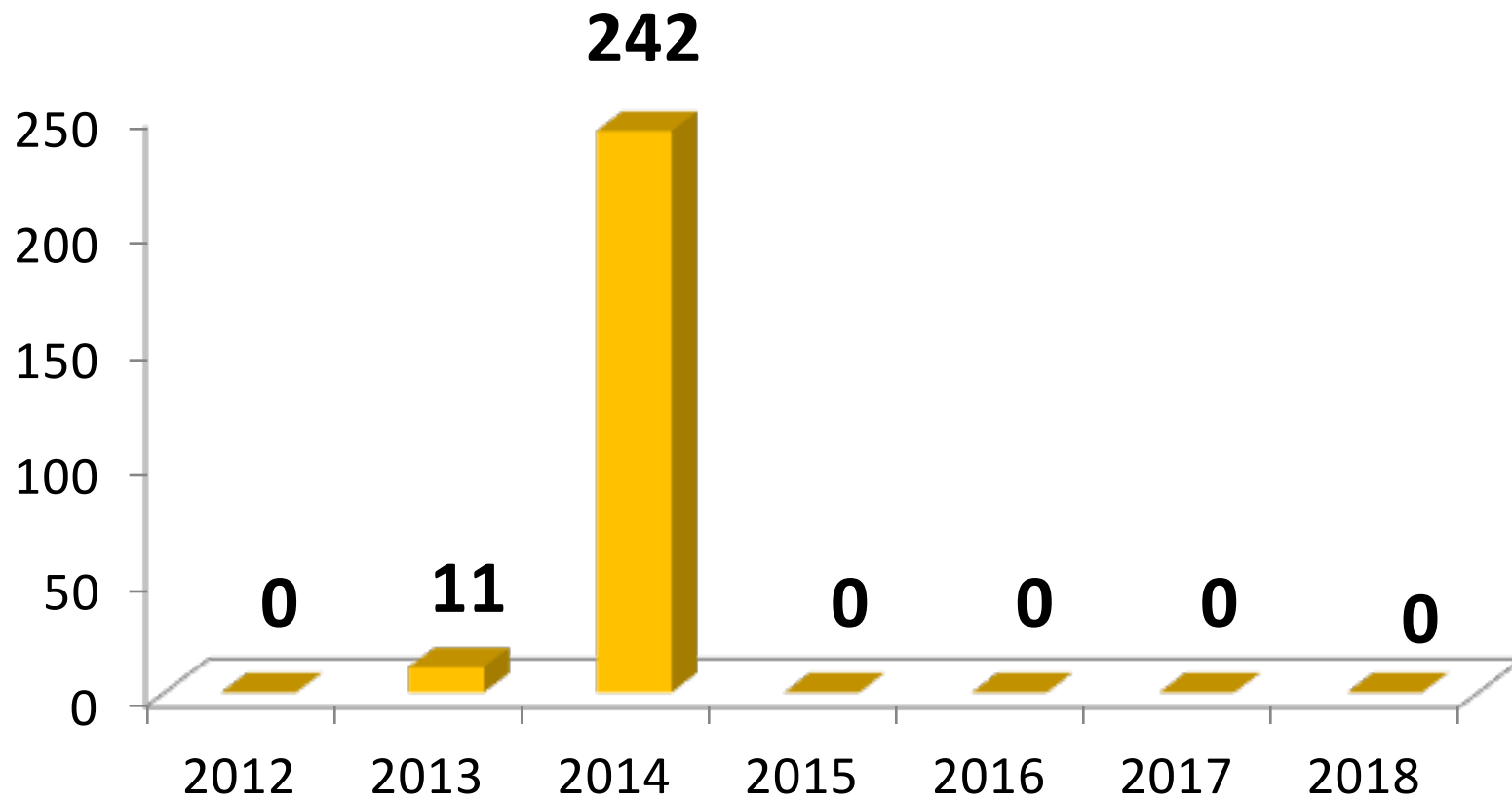
## Rubies registration by type of animals in the RT for 2013-2018

Year		2013	2014	2015	2016	2017	2018
Cases of rubies		63	100	77	97	76	65
Types of animals	Dogs	42	58	45	64	54	42
	Large cattle	17	38	24	27	14	19
Other animals		4	4	8	6	8	4
Number of biting cases		15,074	14,797	13,500	13,207	13,275	12,389

# Epizootic situation on infectious pleural pneumonia of goats

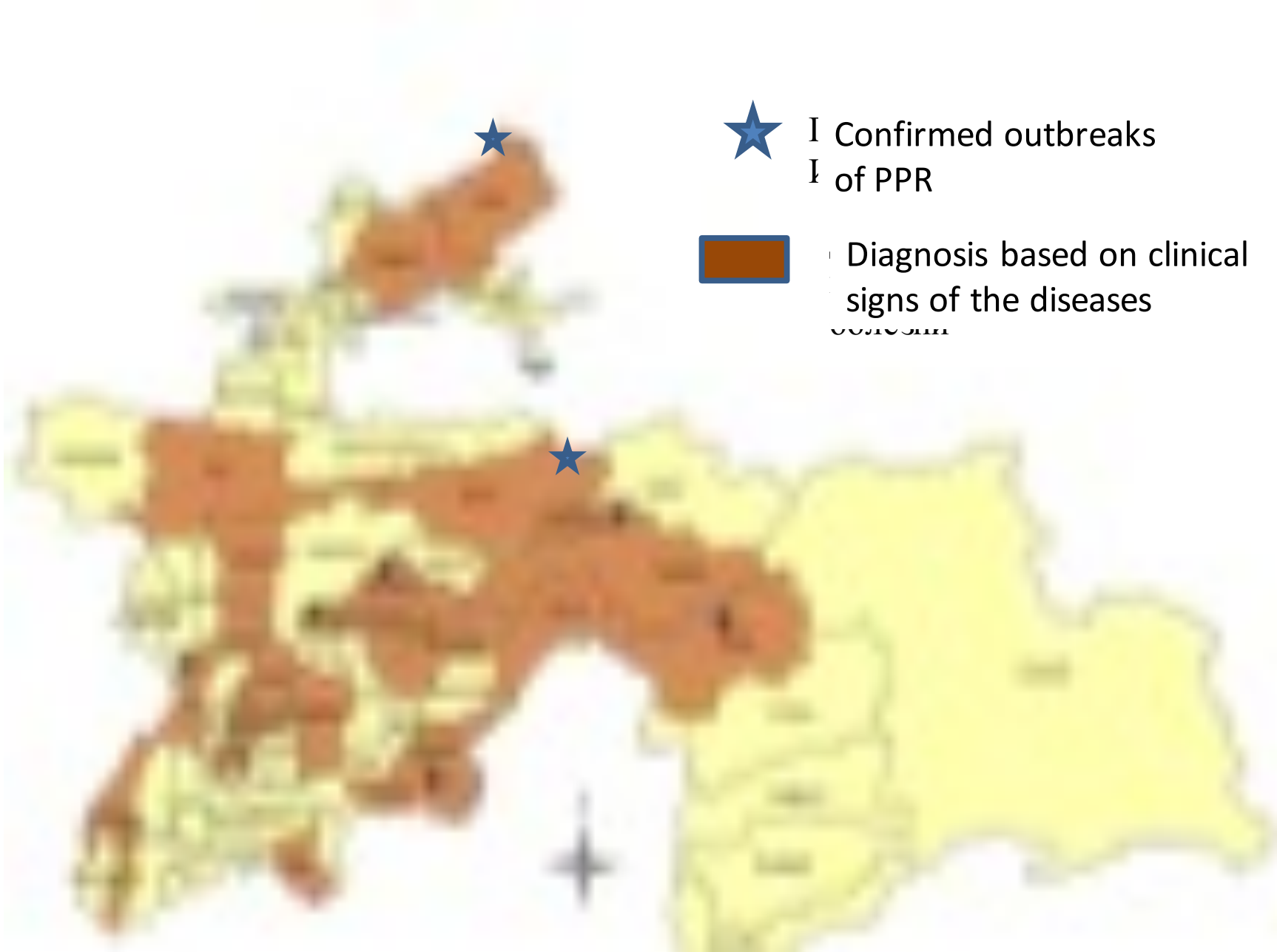


## Epizootic situation on peste des petits ruminants

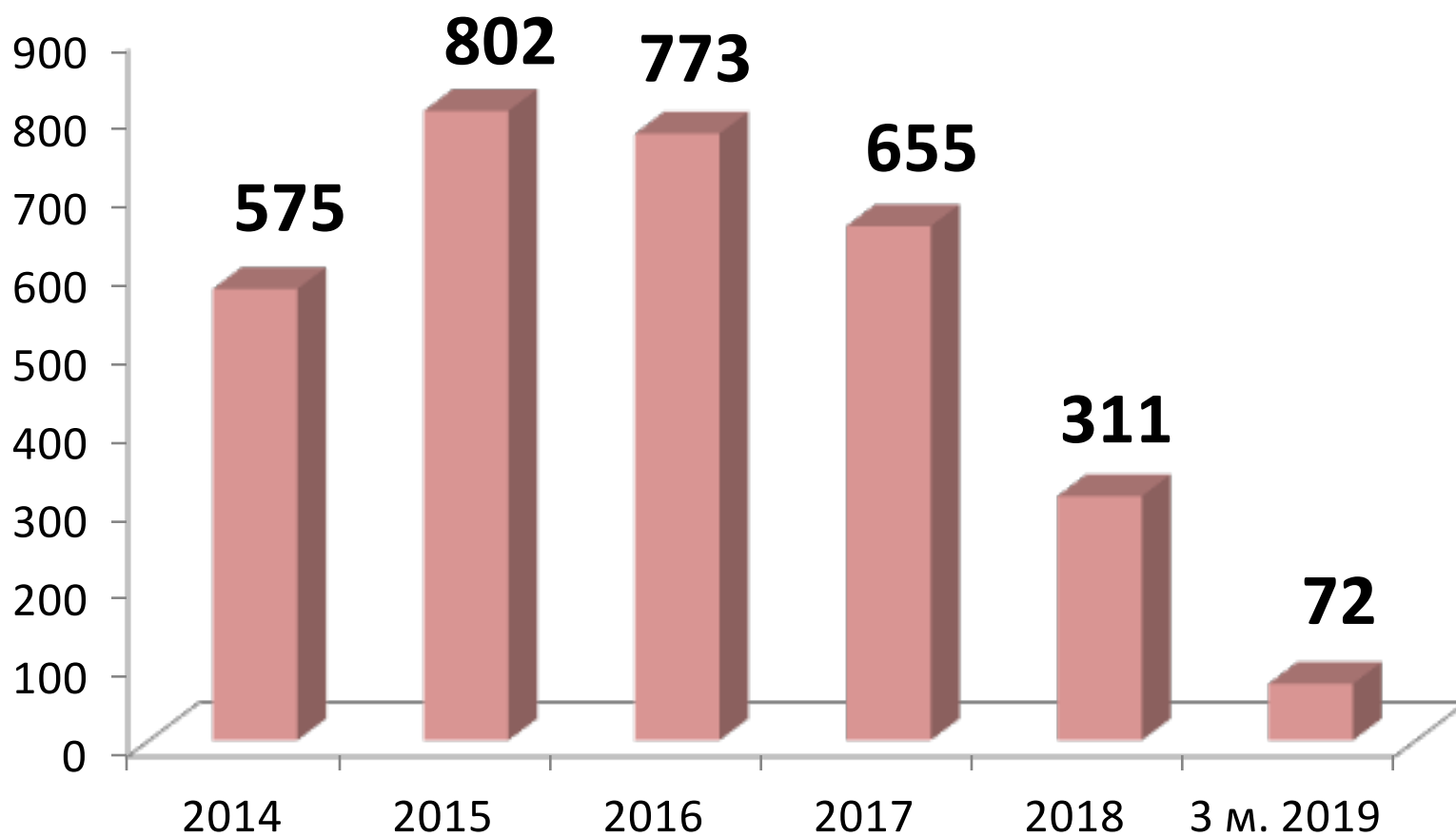




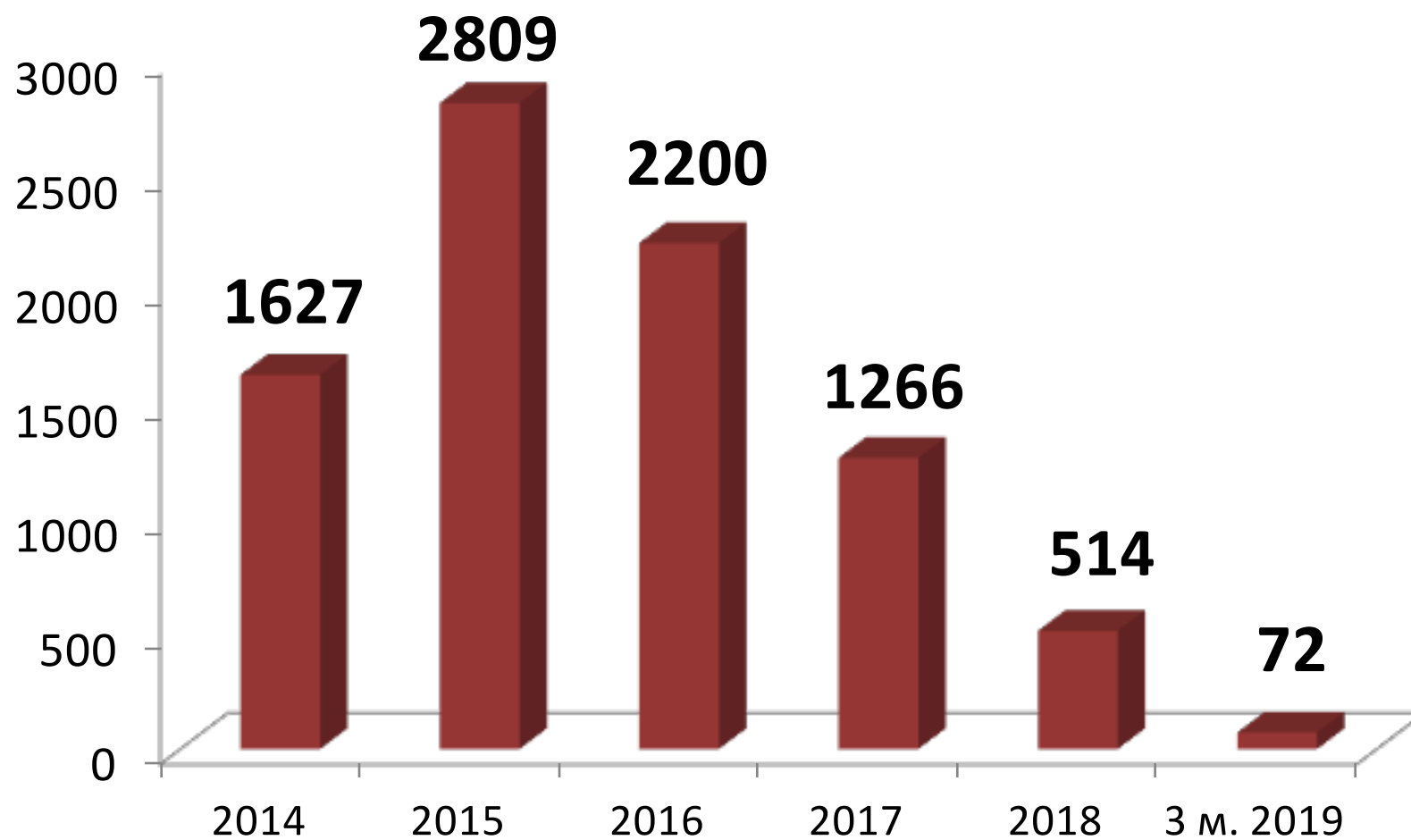
# Spreading of peste des petits ruminants for 2009-2014



## Epizootic situation on brucellosis of large cattle



## Epizootic situation on brucellosis of small cattle



## Vaccination and diagnostic activities for agricultural animals in the Republic of Tajikistan for 2013-2018.

Vaccination against	Year					
	2013	2014	2015	2016	2017	2018
Cattle anthrax	4,762,477	4,715,165	4,607,908	4,560,302	5,141,682	4,691,877
Cattle FMD	1,740,355	1,759,215	1,971,880	2,034,039	2,037,510	1,579,000
Rabies, dogs and other animals	97,156	108,472	110,891	168,262	165,991	99,025
PPR	265,364	1,109,116	508,890	364,659	546,591	290,122
NCD	2,463,061	2,442,406	1,774,189	2,056,806	4,490,806	1,919,374
Sheep and goat pox	492,022	546,655	453,054	422,419	487,085	335,681
<b>Diagnostics of (serum monitoring)</b>						
Large cattle brucellosis	297,268	300,925	325,153	314,185	317,360	297,491
Small cattle brucellosis	416,669	393,189	431,680	402,343	405,357	343,143

# Challenges in the sector

- Insufficient financing for anti-epizootic measures;
- Lack of the latest equipment in virological and bacteriological divisions of veterinary laboratories;
- The absence of animal burial site in cities and raions, mobile incinerators;
- Lack of manuals, methodological guidelines, instructions and other literature;
- Insufficient qualification upgrading training for veterinary specialists in scientific veterinary institutions in and outside the country.

# Support to the sector

- Conducting trainings and workshops for laboratory and field veterinarians;
- Providing all necessary equipment including tools, communication devices and veterinary medicines;
- Upgrading qualification of laboratory technicians-virologists;
- Supporting procurement of diagnostic kits, tests, etc.;
- A need for development partners' support to address these issues.

# Looking forward

- Veterinary and epidemiological stability and the Action Plan for the implementation of a strategy on fighting transboundary diseases;
- Improve the legal framework and information and communication support to activities;
- Establish and maintain reserves, diagnostics kits and vaccines, including against exotic types of FMD virus
- Conducting scientific work to improve the means and methods of diagnosis, specific prevention and measures to combat transboundary animal diseases;
- Conducting monitoring studies to identify animals that had had transboundary animal diseases and virus carriers, including among wild animals;
- Develop and implement plans for preventive immunization of animals and carry out immunological monitoring of animals health in areas with a high risk transboundary animal diseases introduction and spreading.
- Further implementation of existing and new national and sectoral programs (for example: on prevention and control of foot and mouth disease);
- Attract additional investments to improve infrastructure of the veterinary network institutions.

# Support of International Partners

- Establishing of Regional Project on struggle and prevention against transboundary diseases of agricultural animals in Central Asia;
- Capacity building of vet services and laboratories of CAREC country-members;
- Enhancing qualification level of epidemiologists and laboratory experts of CAREC country-members;
- Support of PT in development and adoption of National Program or Strategy on struggle and prevention of anti- foot-and-mouth diseases, peste des petits ruminants and rabies for future years, that enable Tajikistan to step to the next stage on requirement of Road Map IEB and FAO.



Thank you for attention!